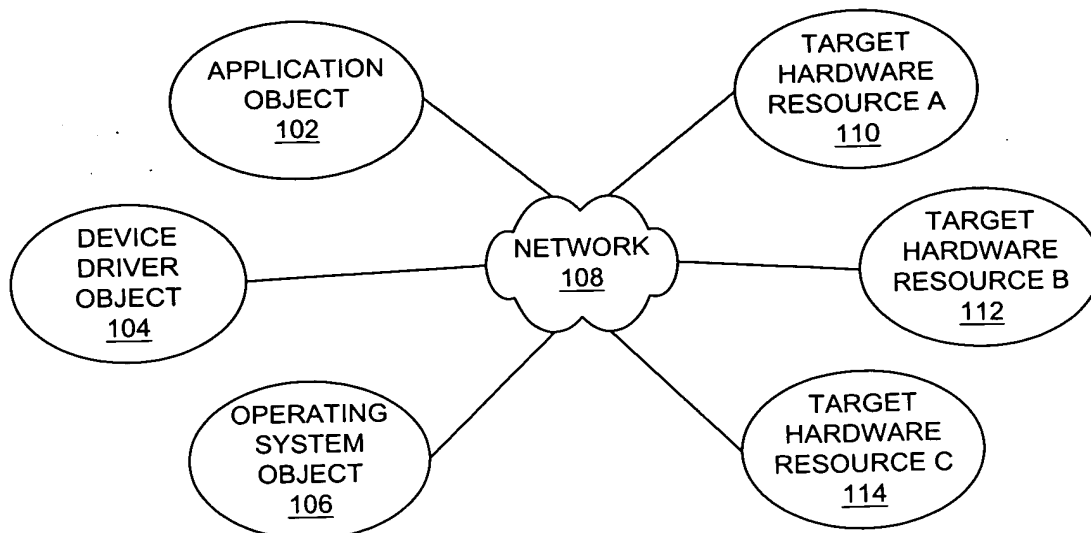
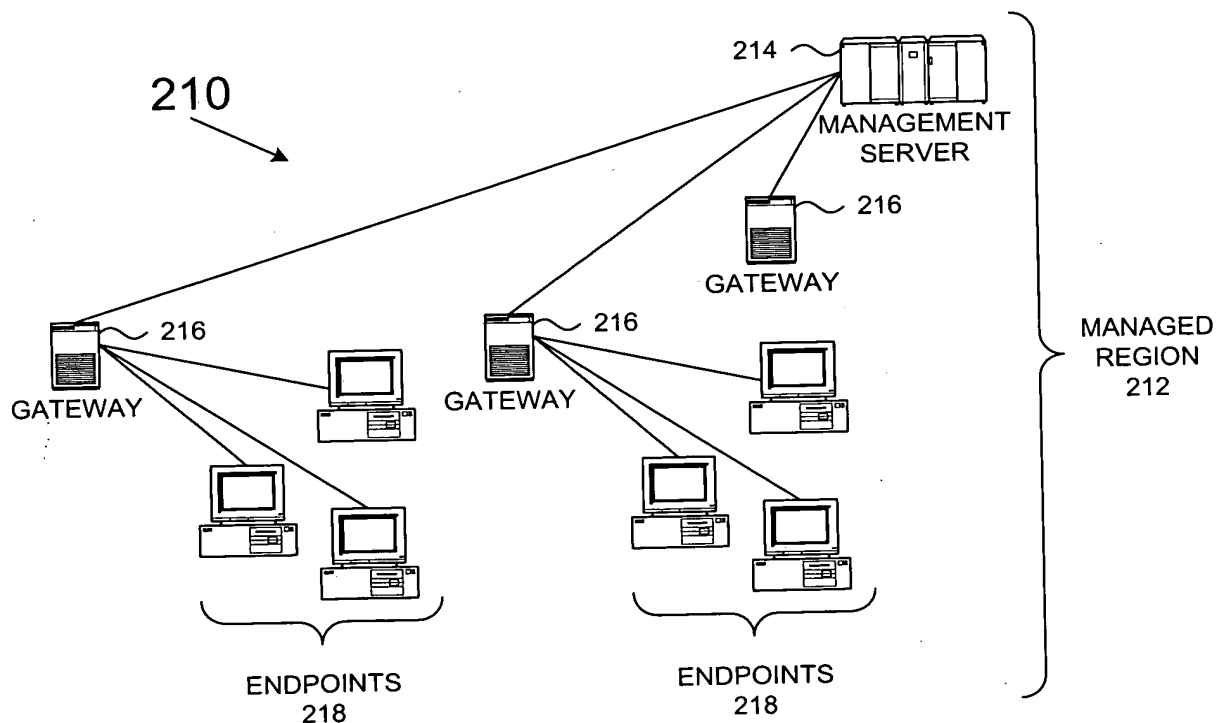


1/22



*FIG. 1*  
(PRIOR ART)



*FIG. 2A*

Method and system for network management with  
backup management with backup status gathering

2/22

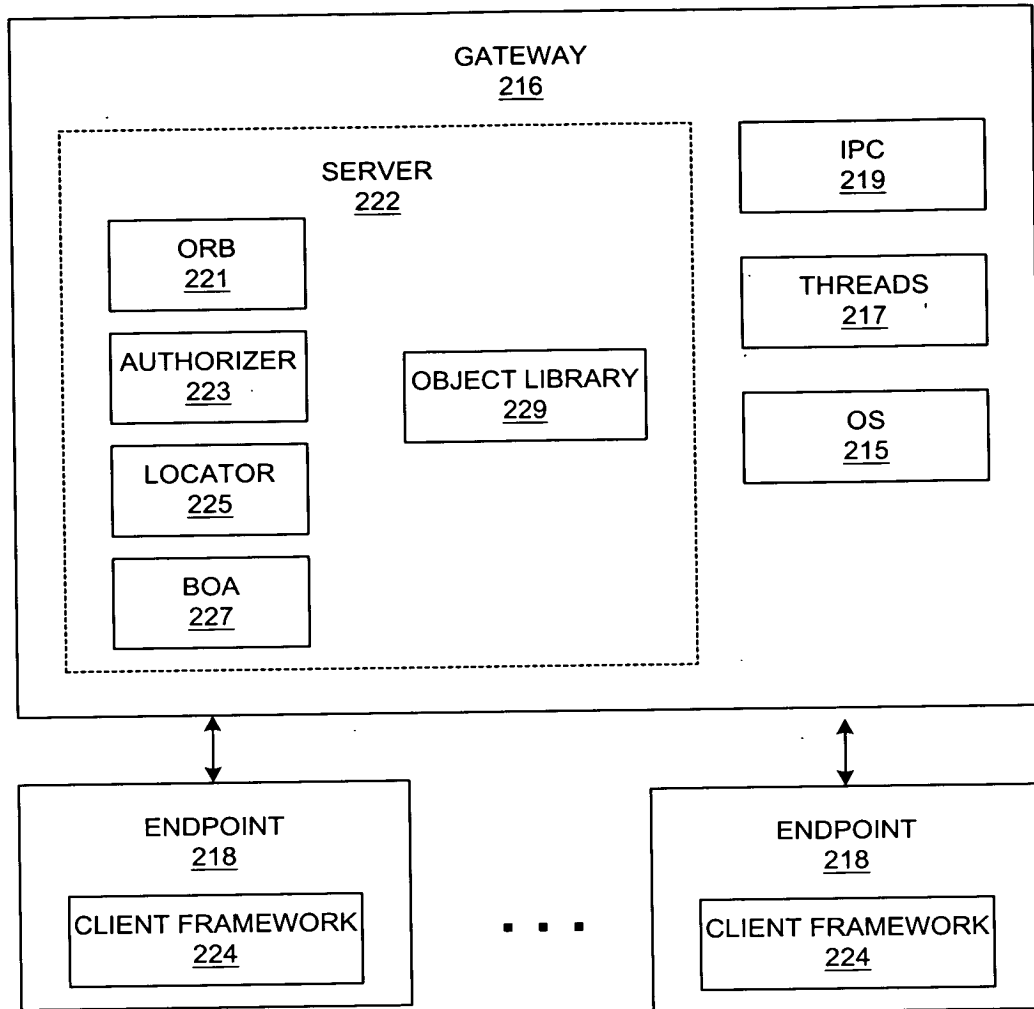


FIG. 2B

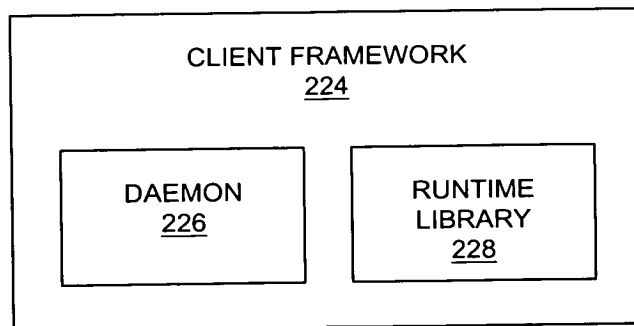


FIG. 2C

Method and system for network management with  
backup management with backup status gathering

3/22

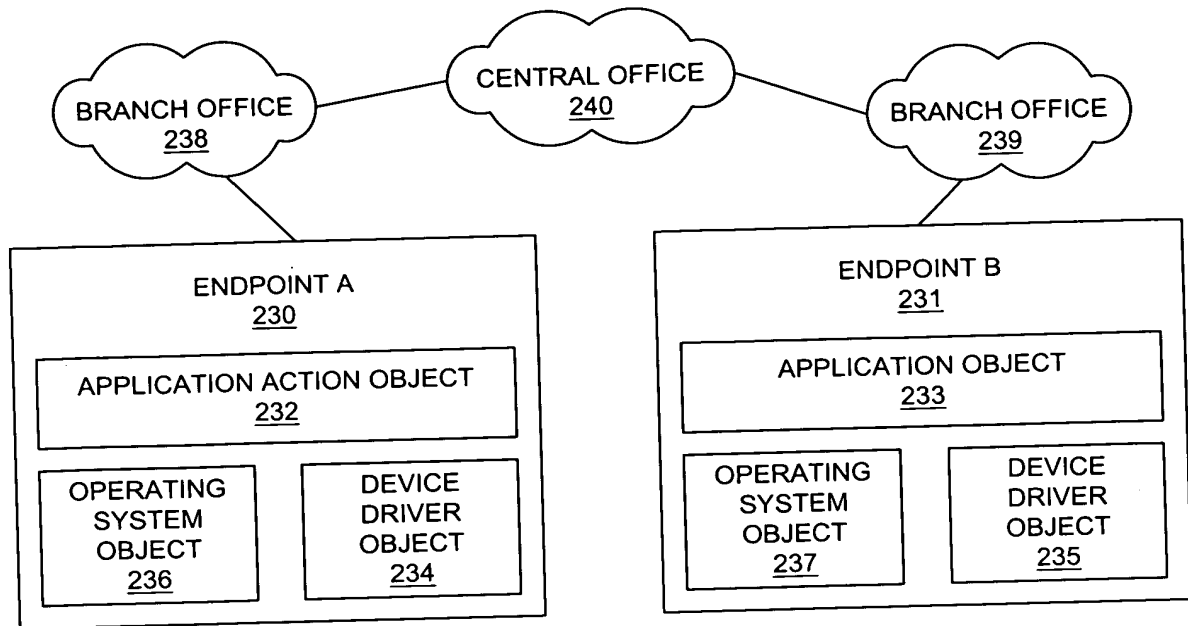


FIG. 2D

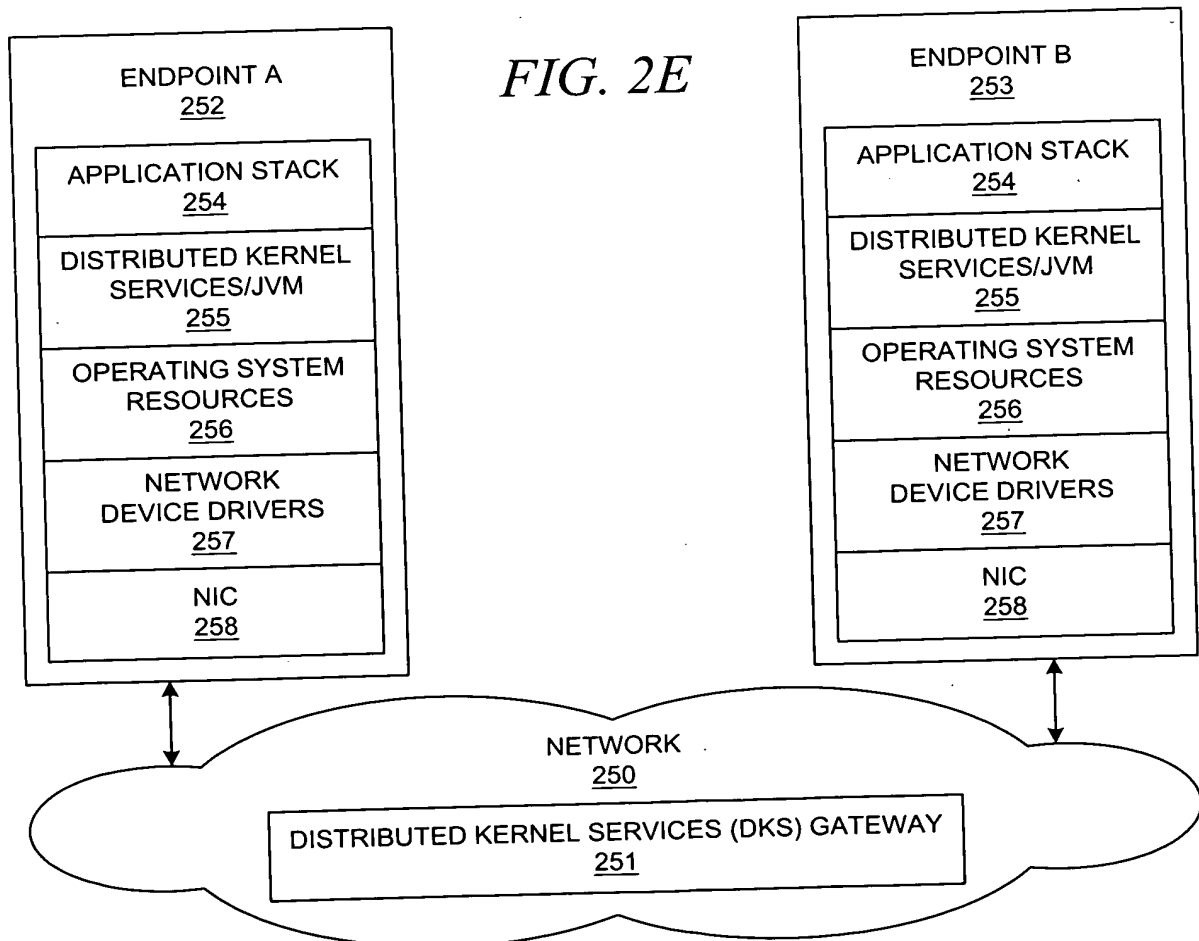


FIG. 2E

Method and system for network management with  
backup management with backup status gathering

4/22

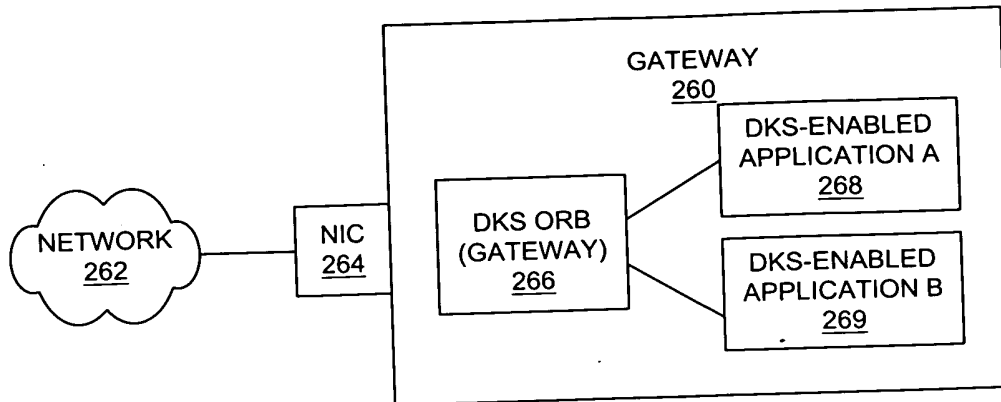


FIG. 2F

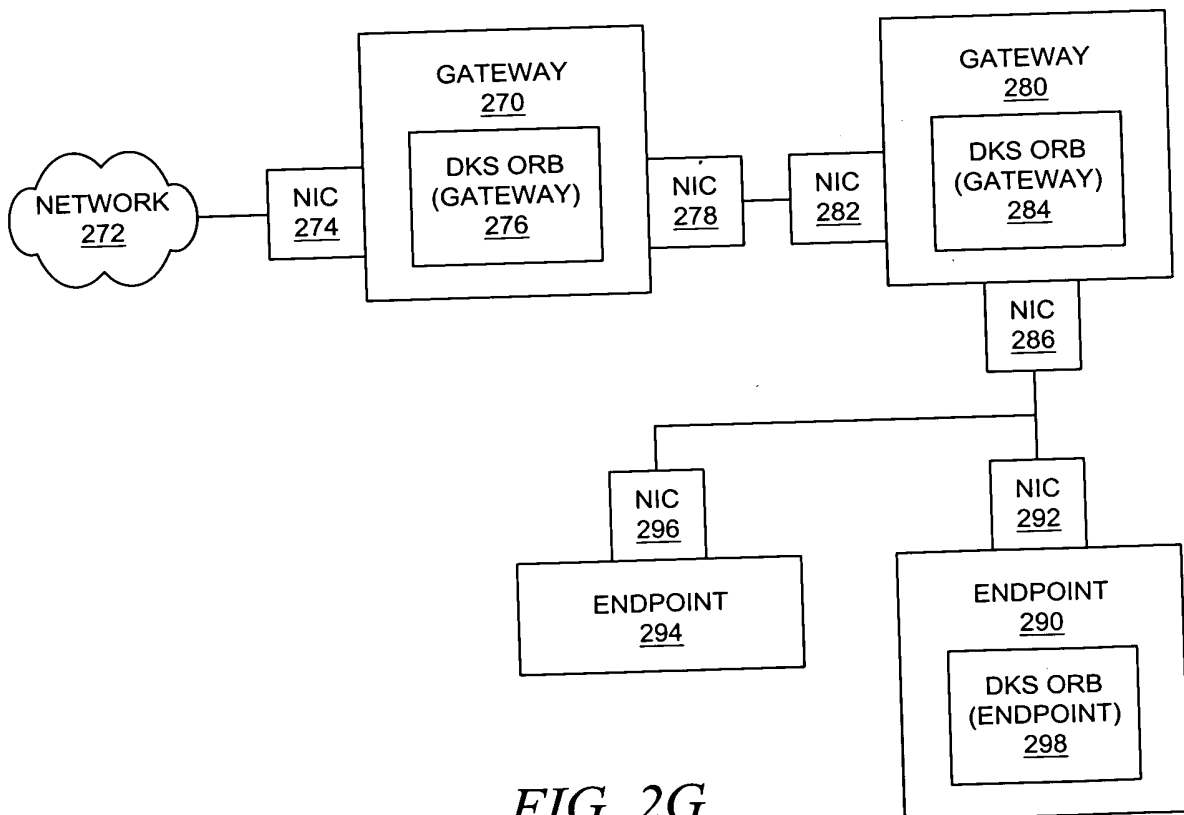


FIG. 2G

FIG. 2G

Method and system for network management with  
backup management with backup status gathering

5/22

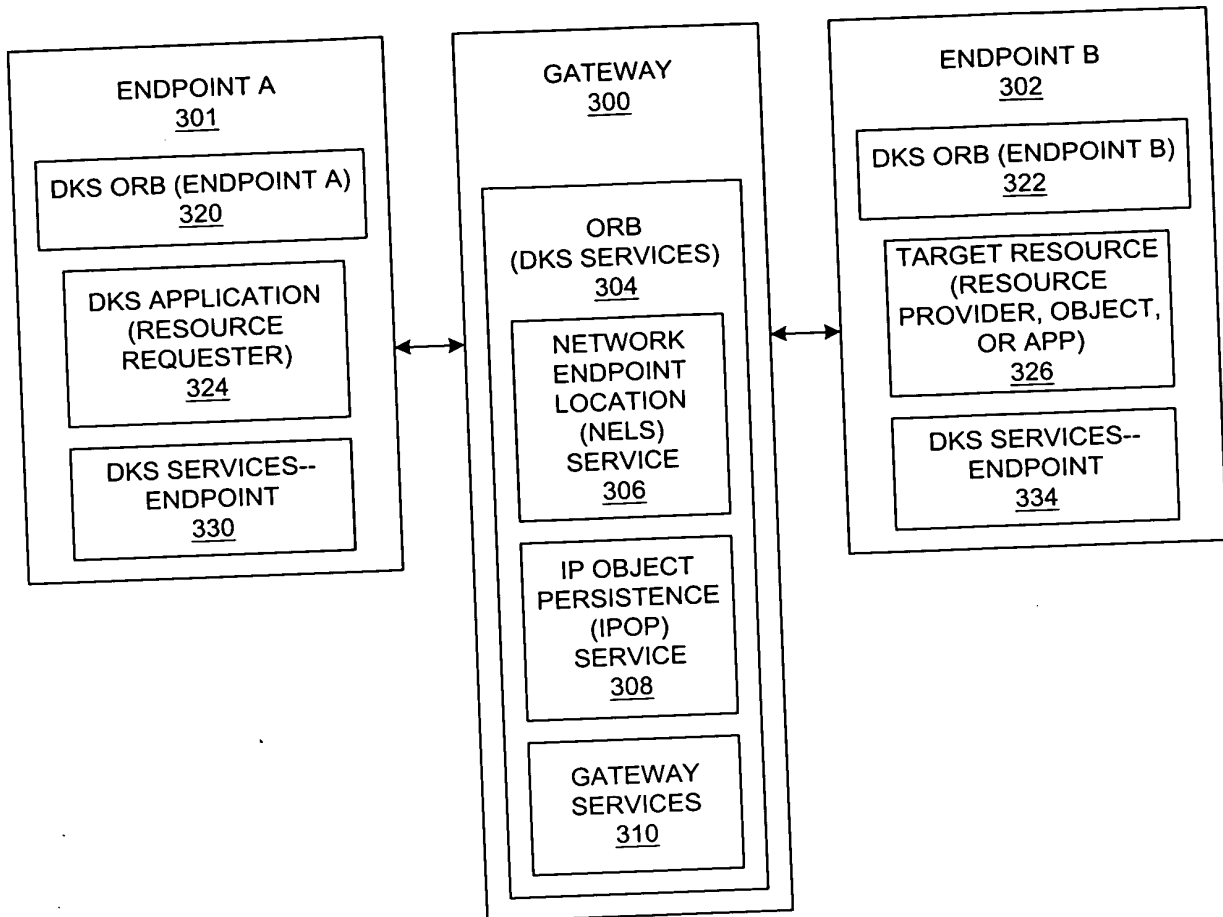


FIG. 3

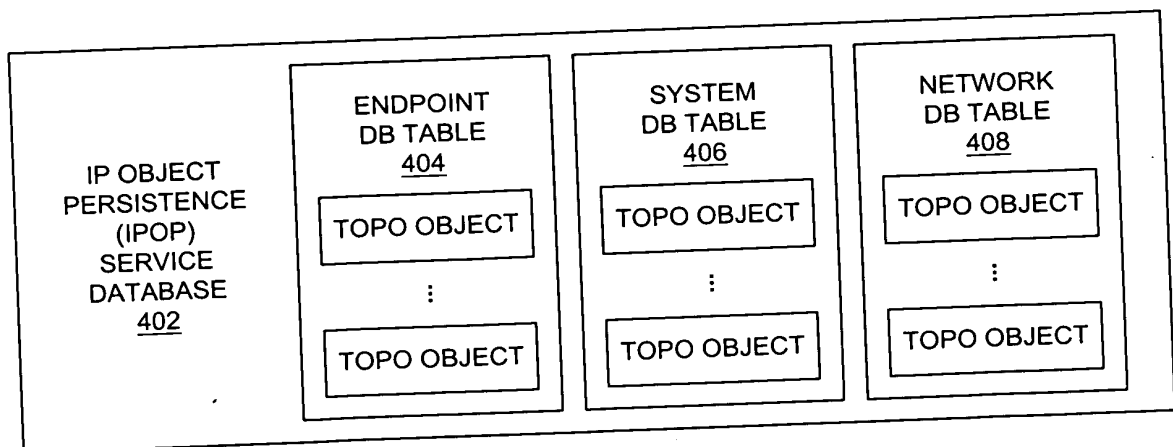


FIG. 4

Method and system for network management with  
 backup management with backup status gathering

6/22

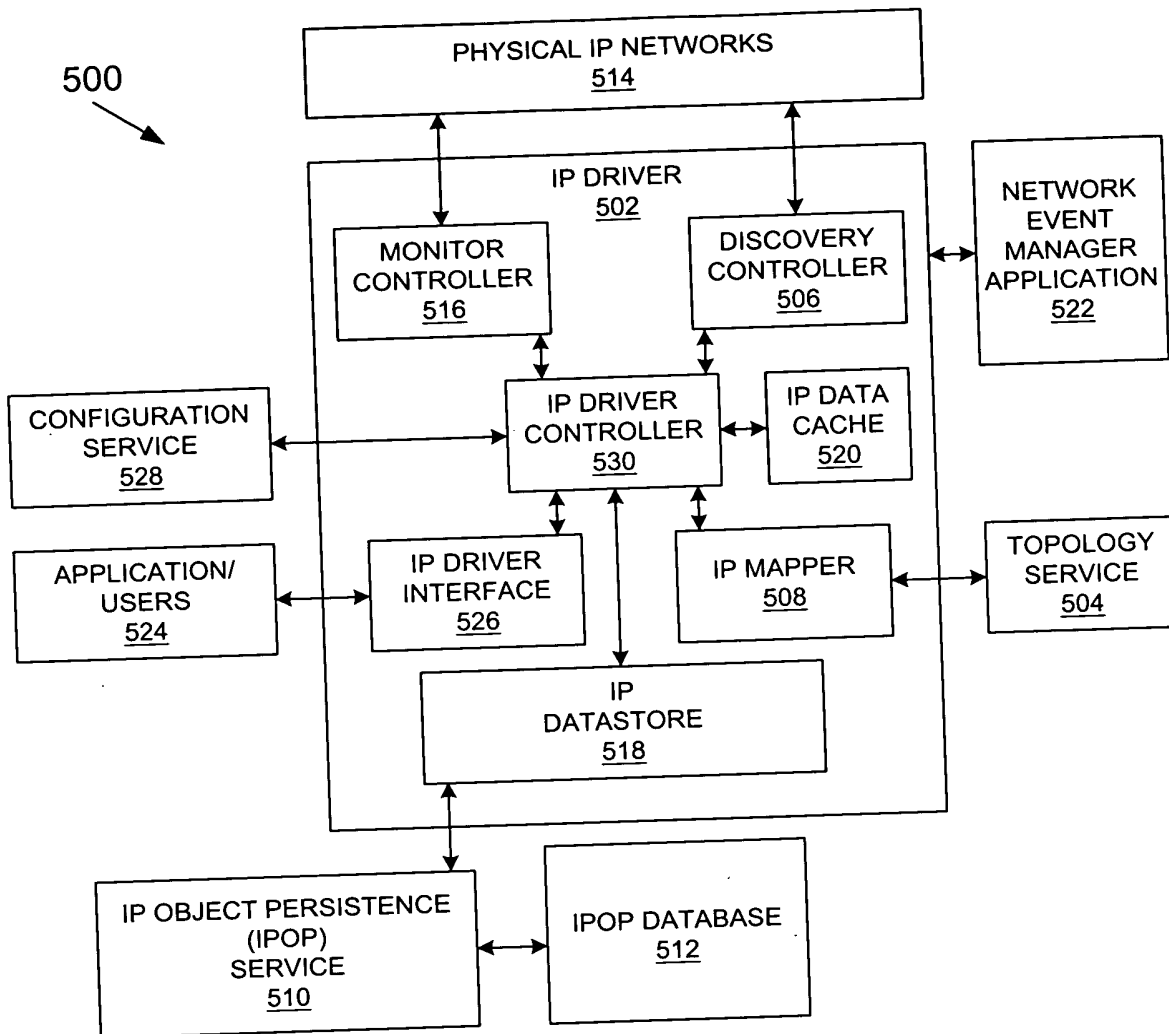


FIG. 5A

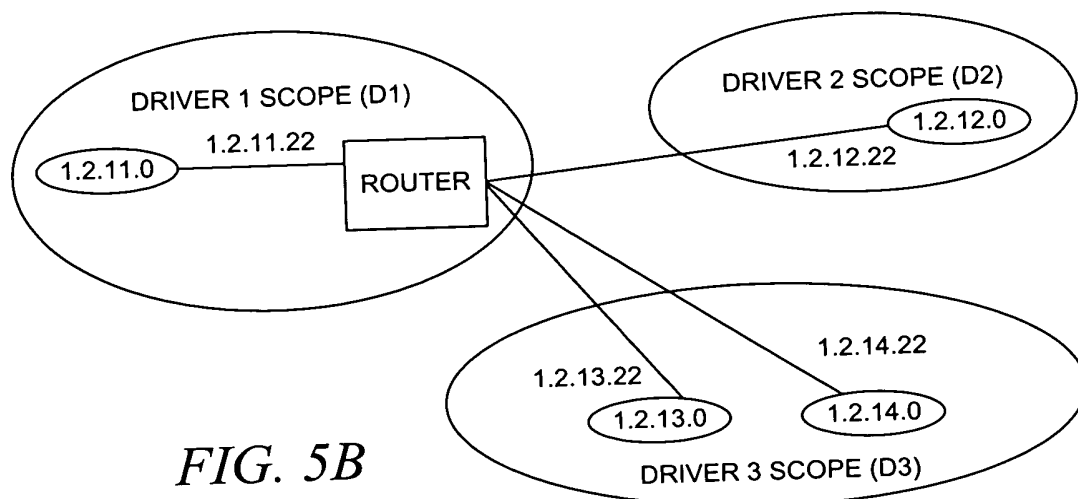


FIG. 5B

Method and system for network management with  
backup management with backup status gathering

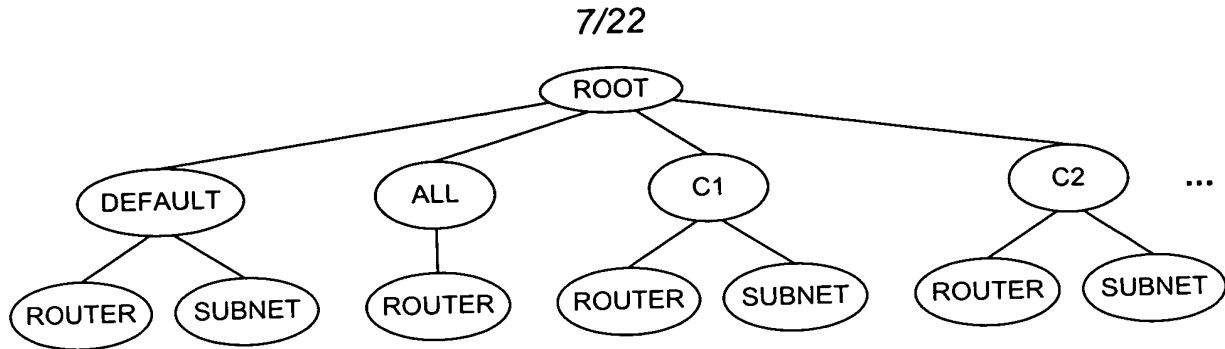


FIG. 5C

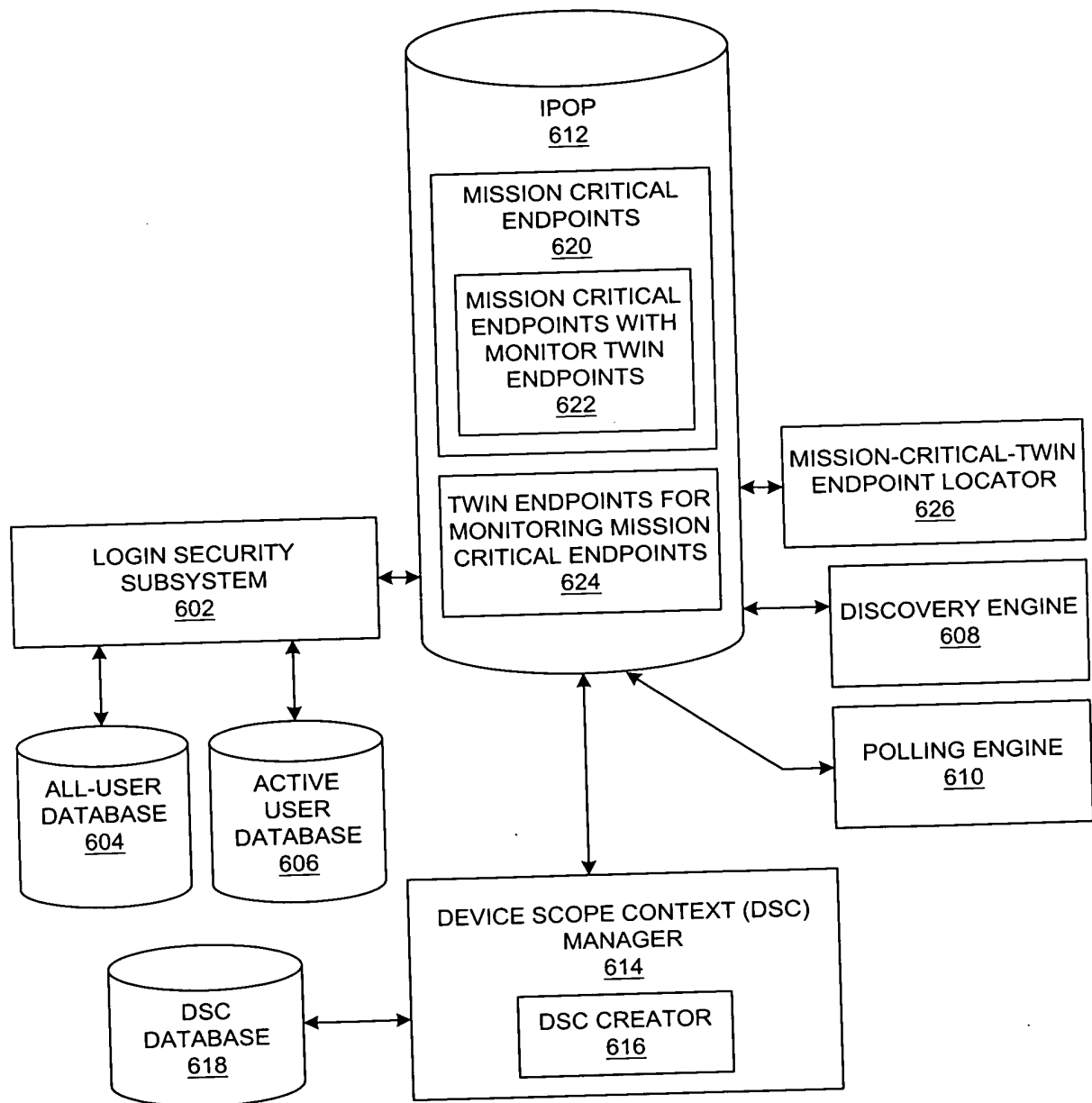


FIG. 6

Method and system for network management with  
backup management with backup status gathering

8/22

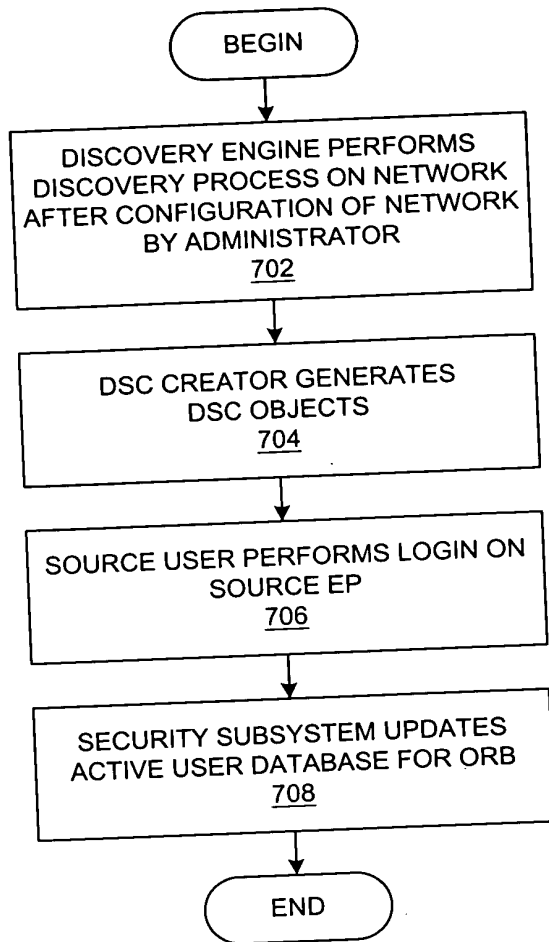


FIG. 7A

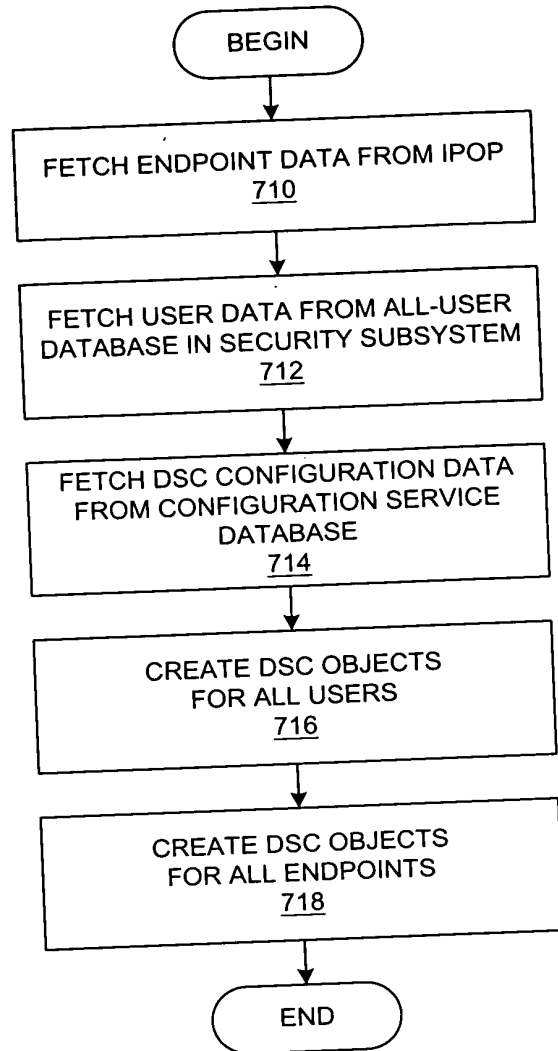


FIG. 7B



Method and system for network management with  
backup management with backup status gathering

9/22

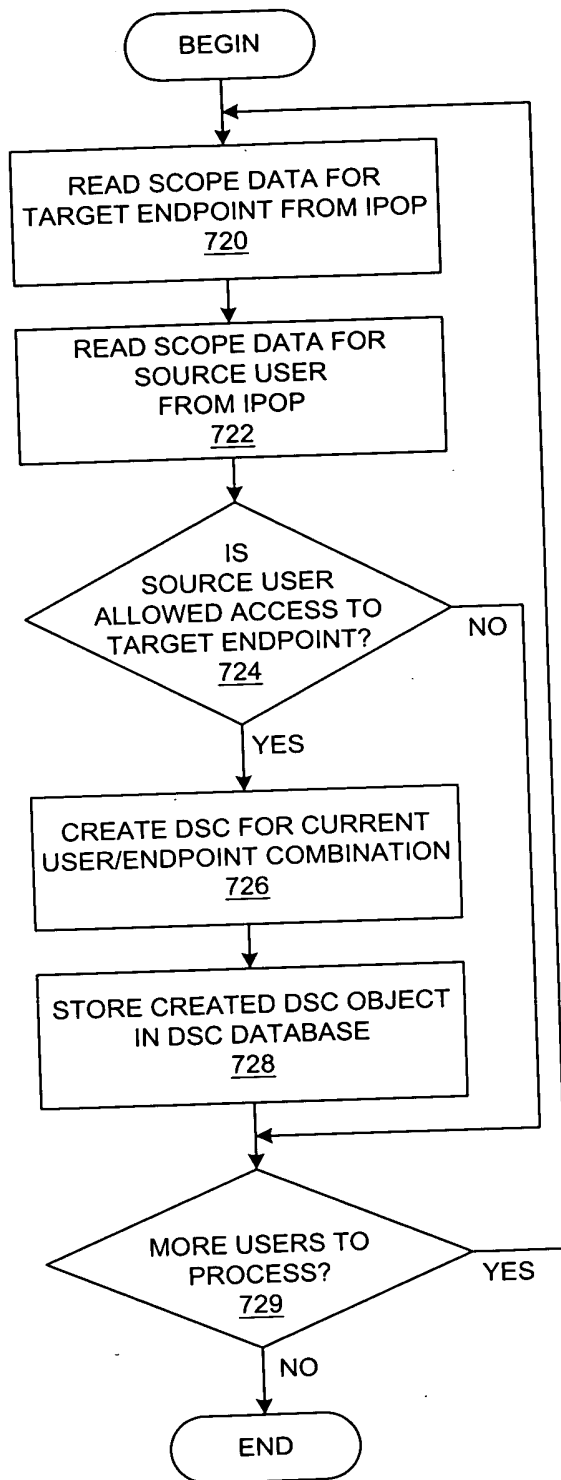


FIG. 7C

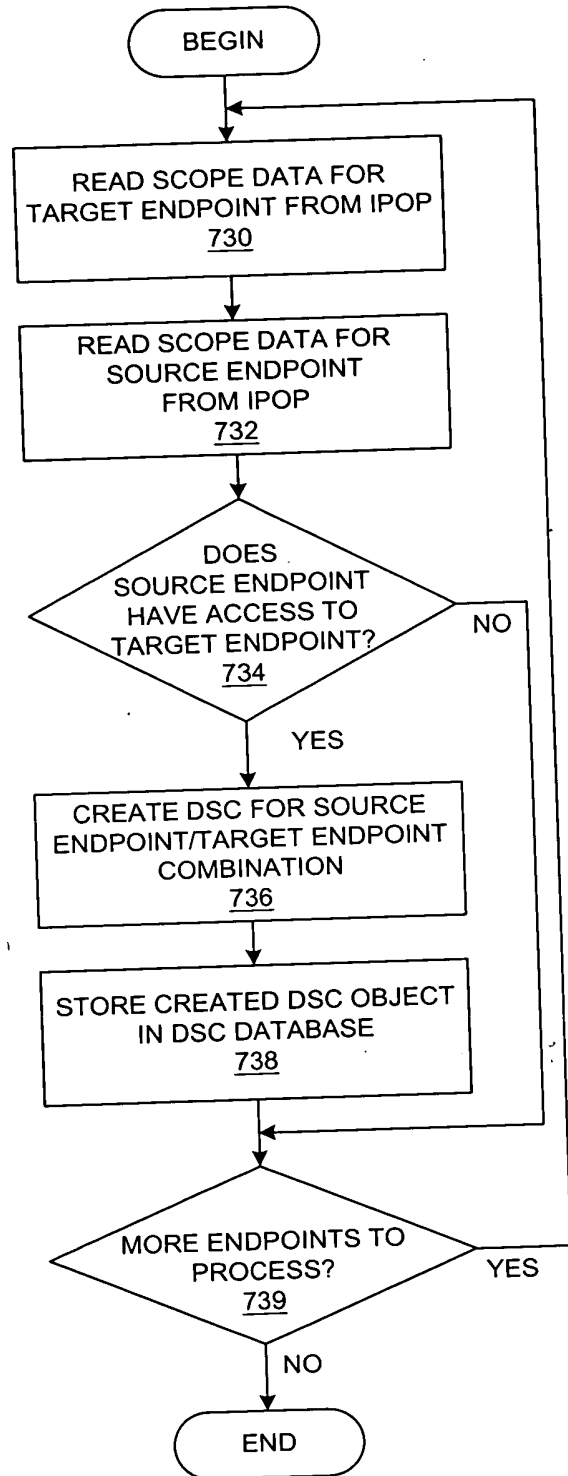


FIG. 7D

Method and system for network management with  
backup management with backup status gathering

10/22

800

Network Management Application

ADAPTIVE MONITORING SETTINGS

POLLING INTERVAL  MINUTES ~ 804

☒ SOURCE USER ~ 805  ~ 806

☐ SOURCE ENDPOINT ~ 807  ~ 808

PRIMARY DSC

☒ BY USER ~ 812

☐ BY ENDPOINT ~ 814

802

810

SET ~ 816

CLEAR ~ 818

FIG. 8A

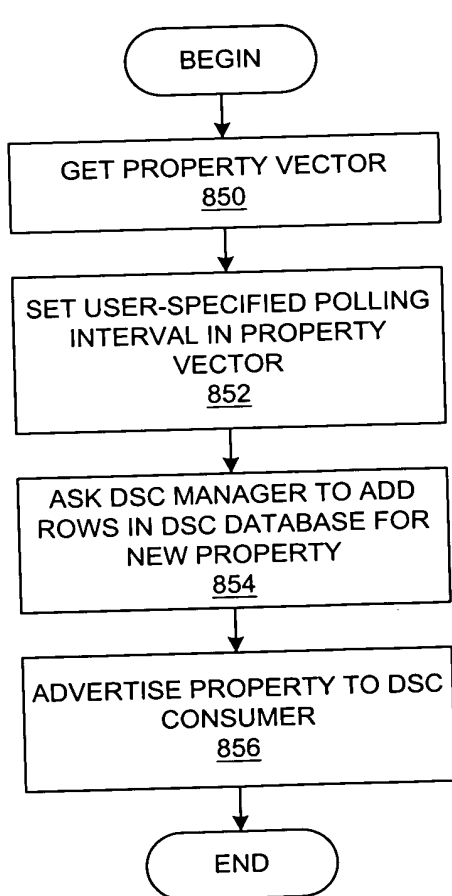


FIG. 8C

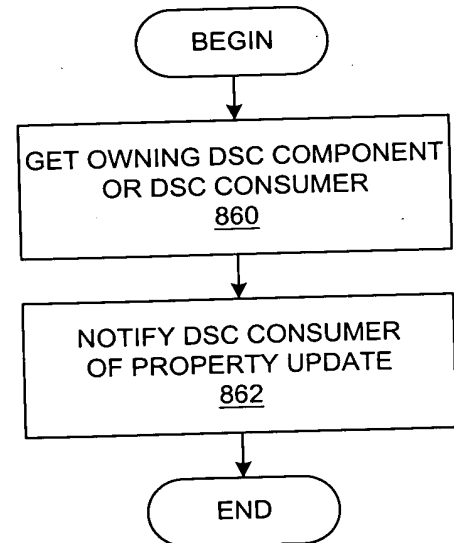


FIG. 8D

11/22

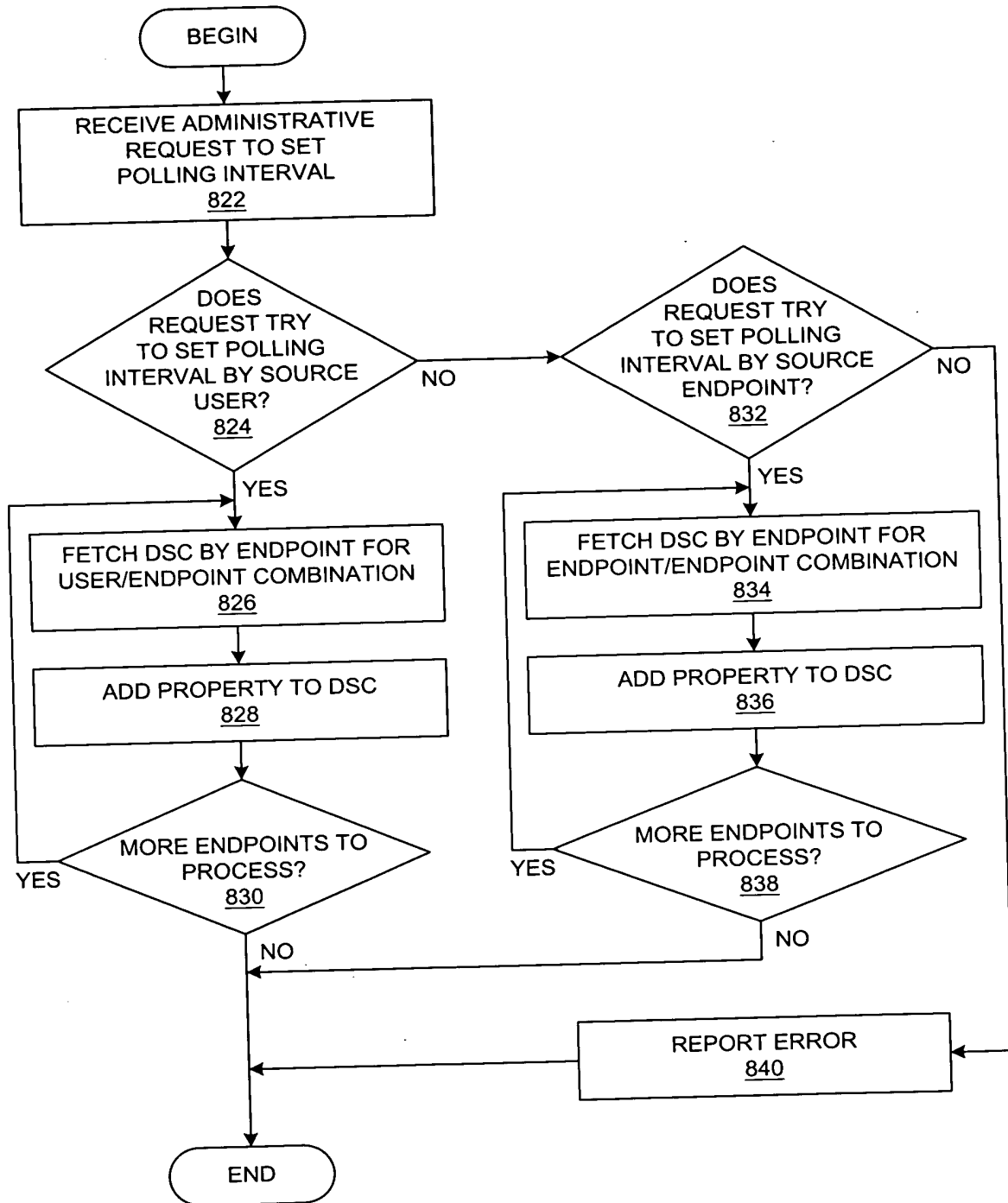


FIG. 8B

Method and system for network management with  
backup management with backup status gathering

12/22

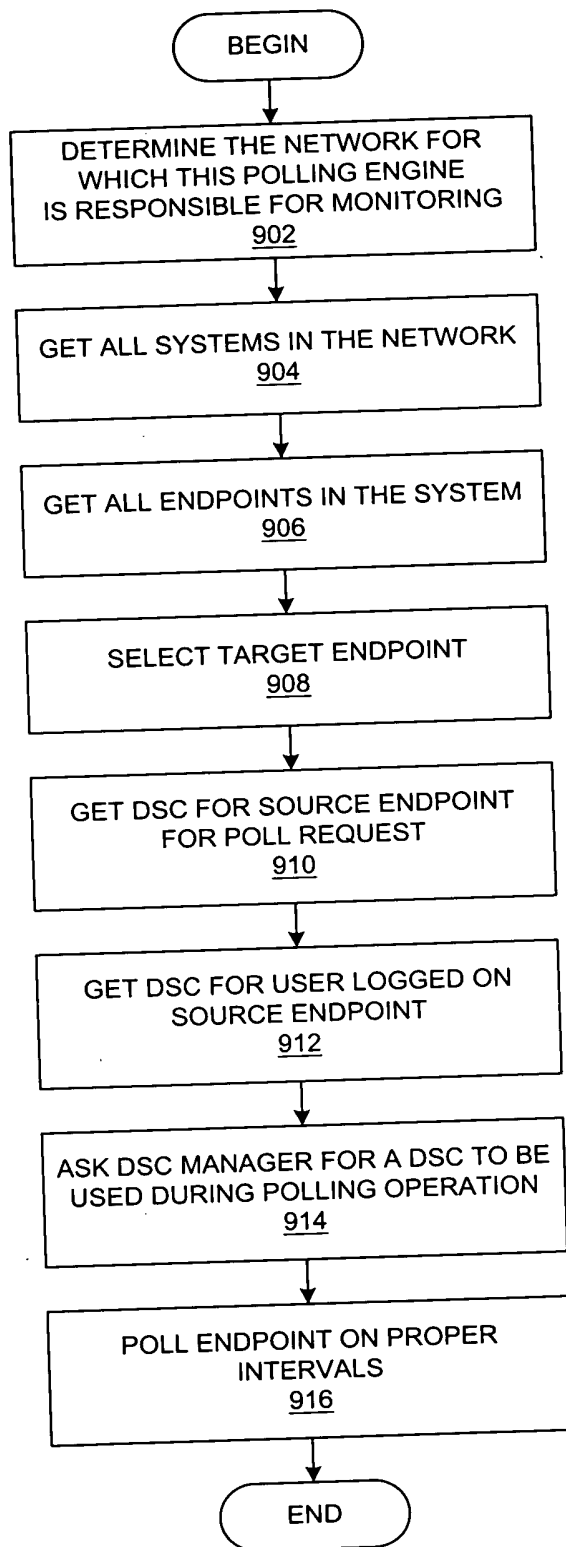


FIG. 9A

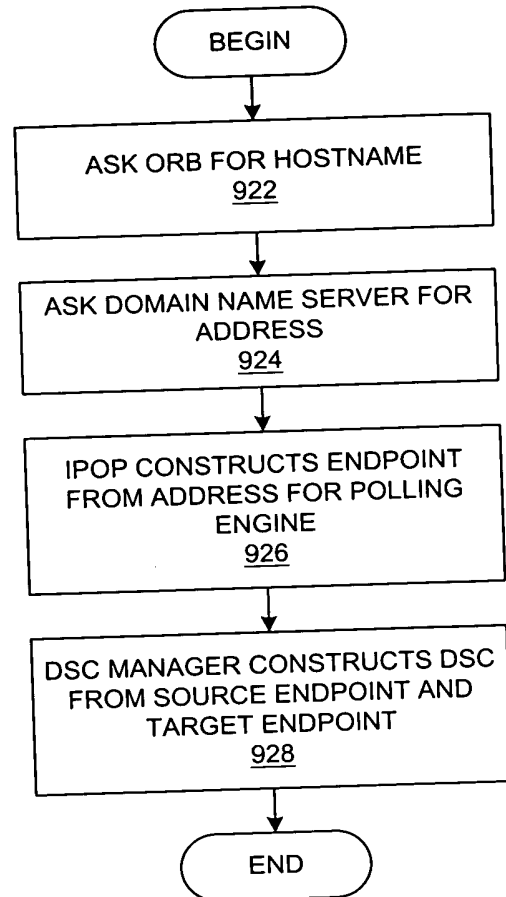


FIG. 9B

Method and system for network management with  
backup management with backup status gathering

13/22

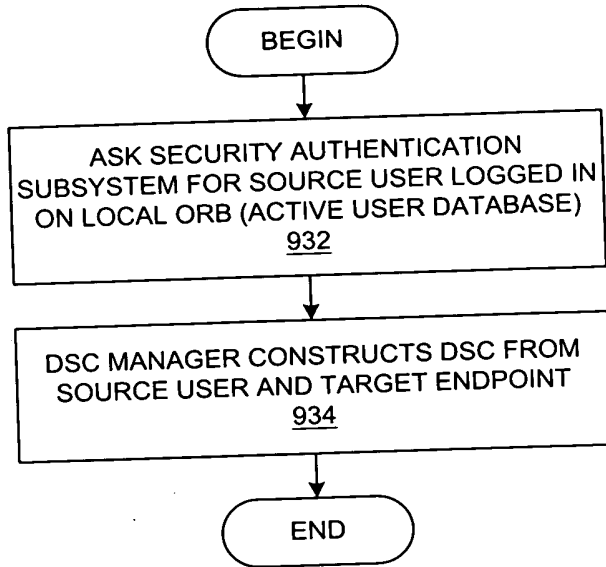


FIG. 9C

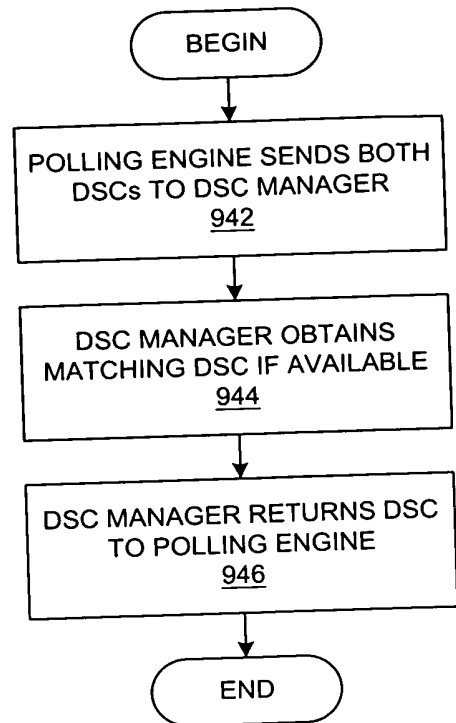


FIG. 9D

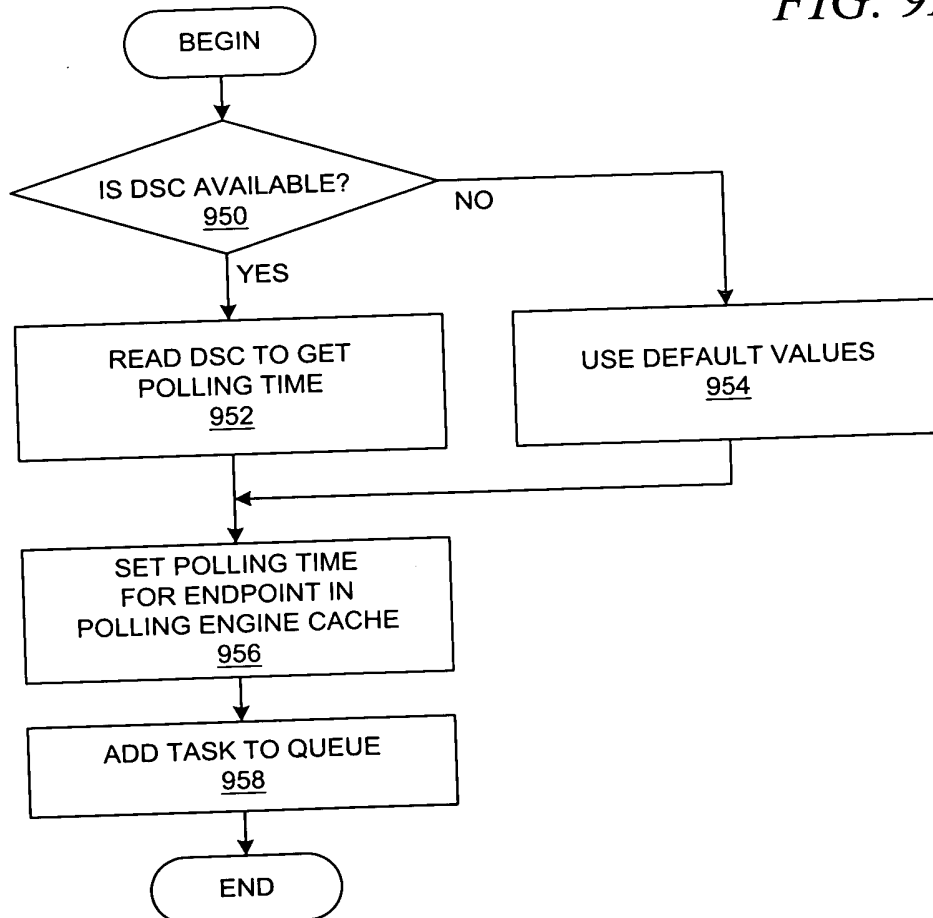


FIG. 9E

Method and system for network management with  
backup management with backup status gathering

14/22

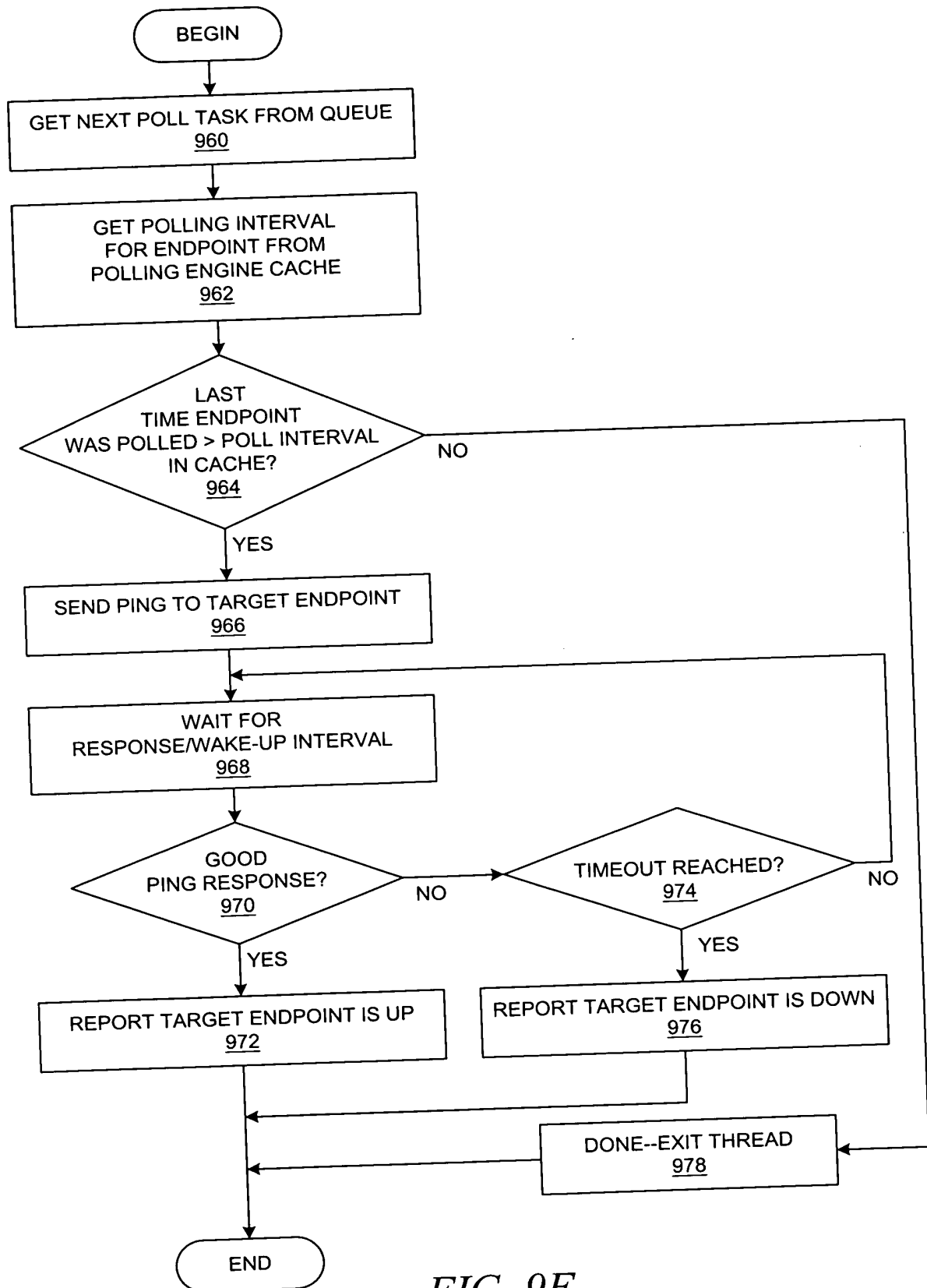
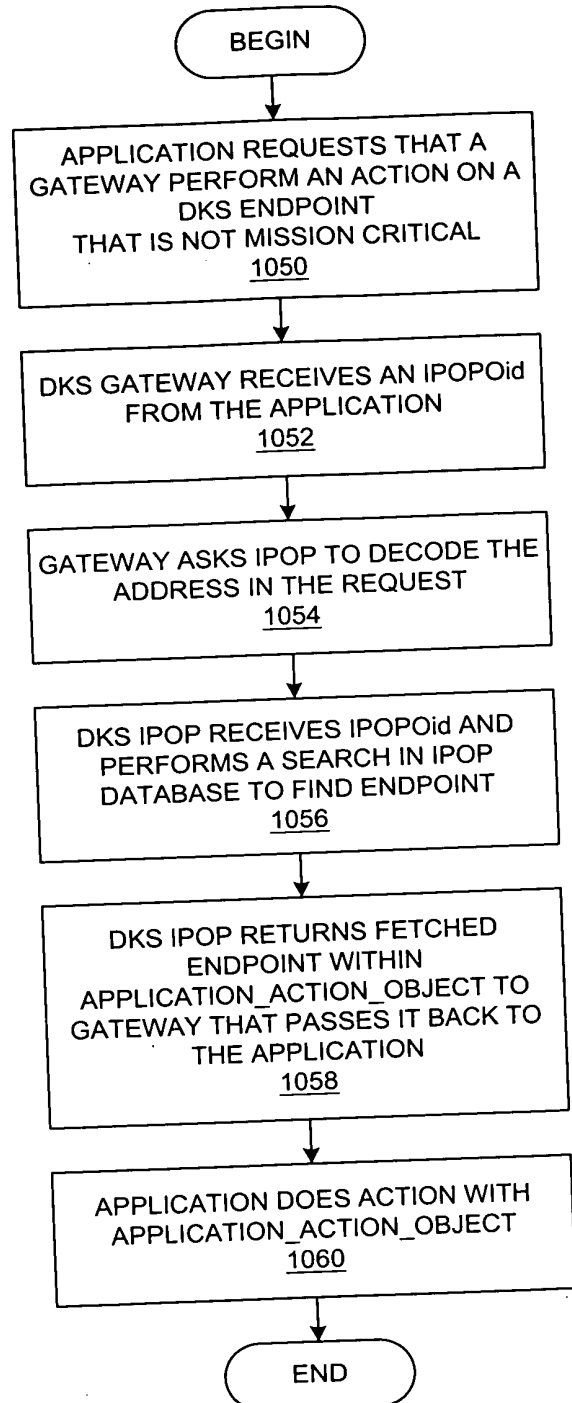
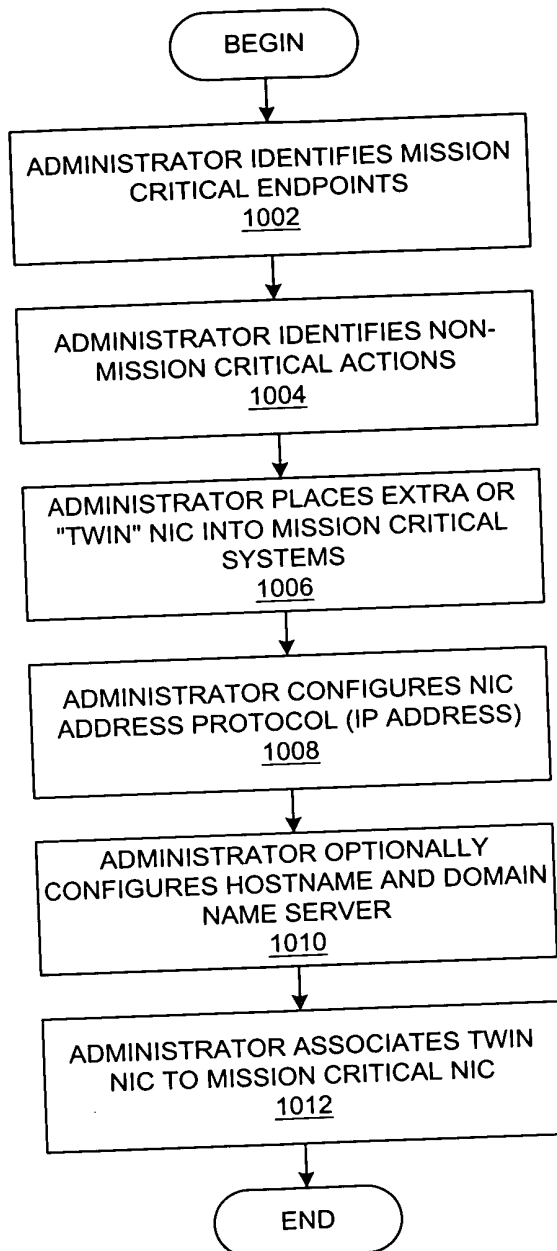


FIG. 9F

15/22



Method and system for network management with  
backup management with backup status gathering

16/22

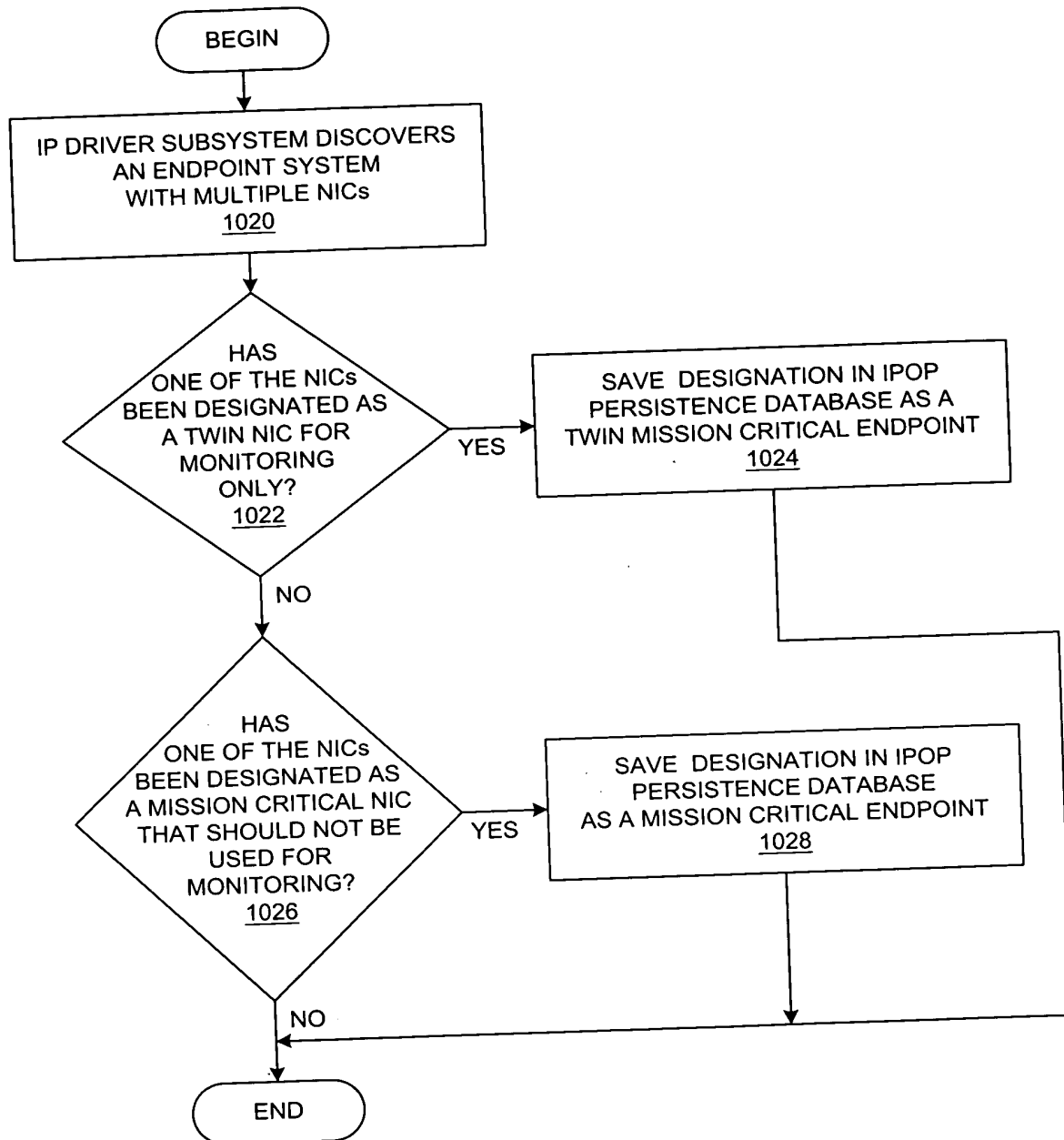


FIG. 10B



17/22

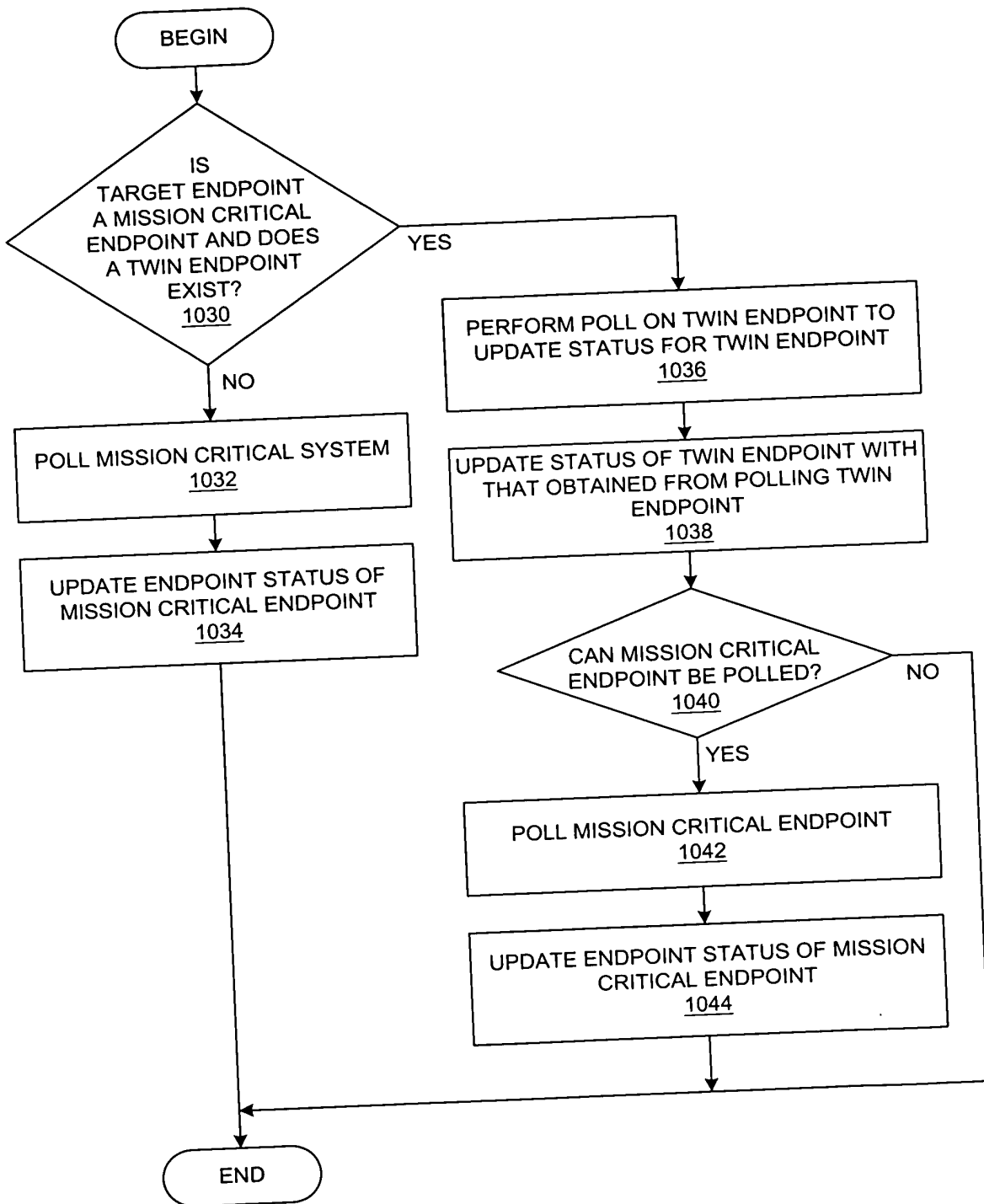


FIG. 10C

18/22

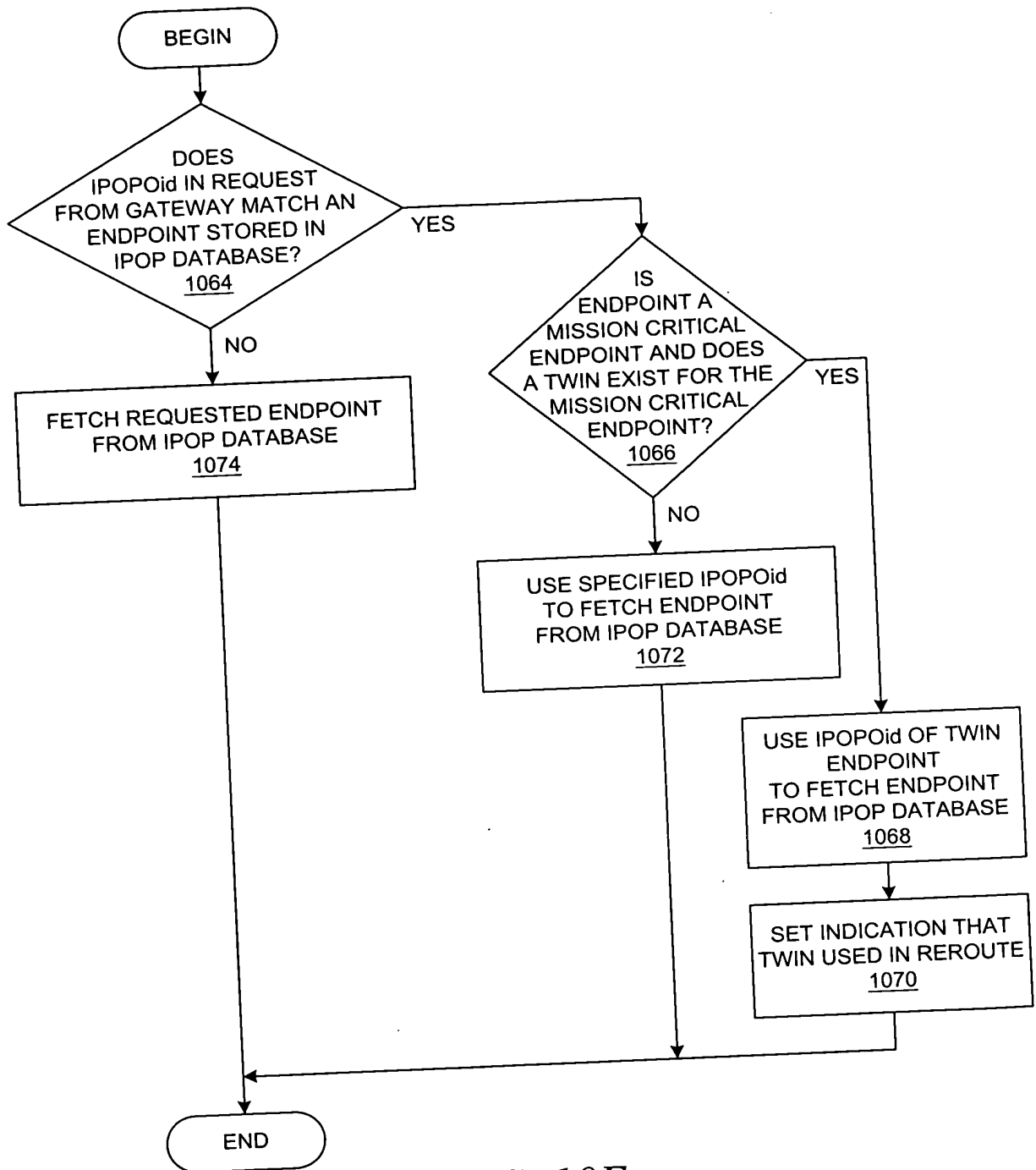


FIG. 10E

Method and system for network management with  
backup management with backup status gathering

19/22

1090

Network Management Application

MISSION CRITICAL TWIN ASSIGNMENT--MISSION CRITICAL ENDPOINT: 7.17.13.11 } 1091

ENDPOINT TO USE AS TWIN:

☐ MAC ADDRESS: 1093

☒ VPN NUMBER: 1094 IP ADDRESS: 1095

1092

SET 1096 CLEAR 1097

FIG. 10F

```

CLASS ACTION_OBJECT {
    // CONSTRUCTOR
    ACTION_OBJECT( LONG IPADDRESS, SHORT VIRTUALPRIVATENETWORKADDRESS )
        THROWS BADADDRESS ...
    .
    .
    VOID PERFORMACTION( ) // EXECUTES ACTION METHOD
    .
    .
}
    
```

FIG. 11A

```

CLASS APPLICATION_ACTION_OBJECT EXTENDS ACTION_OBJECT {
    boolean IsMissionCriticalAction;
        // TRUE = USED TO PERFORM ENTERPRISE-RELATED WORK
        // FALSE = USED TO PERFORM MONITORING OPERATIONS
        // OR OTHER NON-REVENUE PRODUCING ACTION
    .
    boolean TwinUsedinReroute;
        // TRUE = IPOP HAS REPLACED REQUESTED ADDRESS WITH AN ADDRESS
        // THAT CAN BE USED FOR NON-MISSION CRITICAL ACTION
    .
    .
}
    
```

FIG. 11B

Method and system for network management with  
backup management with backup status gathering

20/22

Public Class Endpoint {

```
//public variables
long   EObjectID; // ID to object (both private and public network addresses)
InetAddress EIPAddress; // physical network address (private or public)
long   EPVPN;      // virtual private network ID
```

```
// get/set of variables
public long      getObjectID( ) { ... }
public InetAddress getPAddress( ) { ... }
public long      getVPN( ) { ... }
```

}

*FIG. 11C*

Class TwinMissionCriticalEndpoint extends Endpoint {

.  
.  
.

```
IPOPOid   missionCriticalEndpoint;
           // Mission critical endpoint that is used to gather status
IPOPOid   missionCriticalSystem;
           // Mission critical system
```

```
long      endpointStatus;
long      twinEndpointStatus;
```

.  
.  
.  
.  
.  
.  
.

}

*FIG. 11D*

Class MissionCriticalEndpoint extends Endpoint {

.  
.  
.

```
boolean    useForMonitoring; // TRUE = endpoint can be used for monitoring,
                             // polling, and other system-management-type
                             // resources
```

.  
.  
.  
.  
.

}

*FIG. 11E*

21/22

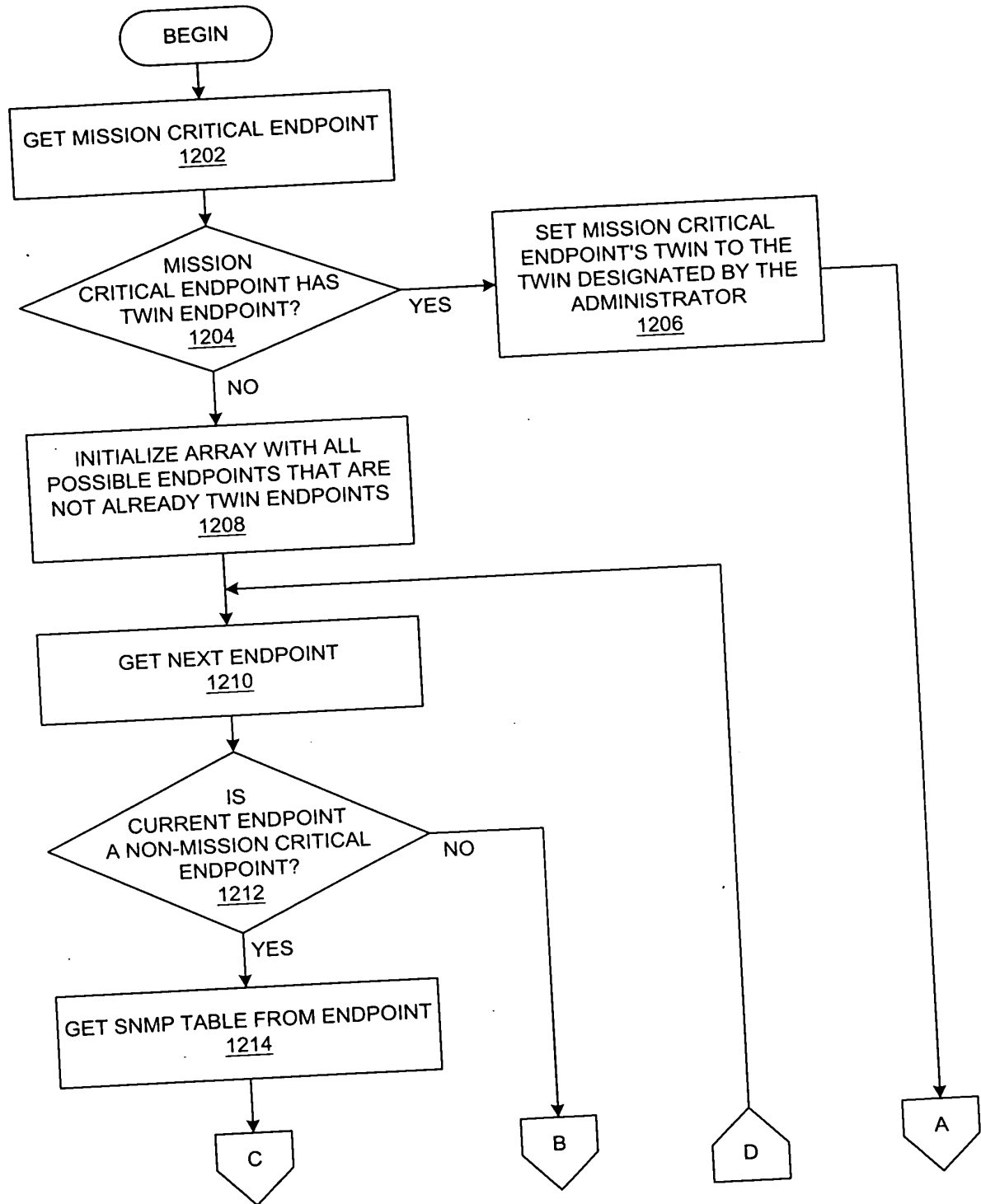


FIG. 12A

Method and system for network management with  
backup management with backup status gathering

22/22

